

Effects of surface active compounds on electric stability of petroleum

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Abstract

Effects of oil-soluble non-ionogenic and anionic surfactants on the electric stability of dry petroleum were studied. It was shown that low concentrations (10^{-4} -0.05 %) of admixed non-ionogenic surfactants led to increase of petroleum electric stability. At higher concentrations the behaviour of petroleum stability differs depending on the chemical nature of surfactants. Addition of anionic surfactants led to monotonic decrease of petroleum electric stability with surfactant concentration rise. Explanation of all observed phenomena is proposed.
